Listing of Claims:

Claim 1 (Cancelled)

Claim 2 (Cancelled)

Claim 3 (Cancelled)

Claim 4 (Cancelled)

Claim 5 (Cancelled)

Claim 6 (Cancelled)

Claim 7 (Cancelled)

Claim 8 (Cancelled)

Claim 9 (Cancelled)

Claim 10 (Cancelled)

Claim 11 (Cancelled)

Claim 12 (Cancelled)

Claim 13 (Previously Amended) A network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, wherein said server comprises:

a permanent ID information storage section for storing permanent IDs of each of the clients, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent;

a polling transmission section for polling the clients from which an ACK or NACK has not been received after file data was transmitted to the clients by means of

broadcast or multicast, wherein in a polling mode with non-receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need reply to the polling, whereas in a polling mode with receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need not reply to the polling;

a detection section for detecting a number N of clients from which an ACK or NACK has not been received in response to the transmission of the file data from the server to the clients by means of broadcast or multicast; and

a switching section for switching between the polling mode with non-receipt information and the polling mode with receipt information in said polling transmission section based on the number N, and

wherein said client comprises:

a permanent ID information storage section for storing its own permanent ID information;

a determination section for determining whether or not to reply to the polling based on whether its own permanent ID is contained in the packet for polling itself or notification of information prior to the polling that has been received by means of broadcast or multicast; and

a reply section for replying or not replying to said server in response to the packet for polling received by means of broadcast or multicast based on the determination made by said determination section.

Claim 14 (Original) The network system according to claim 13, wherein the switching section determines, based on N, which makes the number of packets to be transmitted smaller, the polling mode with non-receipt information or the polling mode with receipt information, and based on the determination switches between the polling mode with non-receipt information and the polling mode with receipt information in said polling

transmission section.

Claim 15 (Previously Amended) A server in a network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, comprising:

a permanent ID information storage section for storing permanent IDs of each of the clients, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent;

a polling transmission section for polling the clients from which an ACK or NACK has not been received after file data was transmitted to the clients by means of broadcast or multicast, wherein in a polling mode with non-receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need reply to the polling, whereas in a polling mode with receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need not reply to the polling;

a detection section for detecting a number N of clients from which an ACK or NACK has not been received in response to the transmission of the file data from the server to the clients by means of broadcast or multicast; and

a switching section for switching between the polling mode with non-receipt information and the polling mode with receipt information in said polling transmission section based on the number N.

Claim 16 (Original) The server according to claim 15, wherein said switching section determines, based on N, which makes the number of packets to be transmitted smaller, the polling mode with non-receipt information or the polling mode with receipt

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information, and based on the determination switches between the polling mode with non-receipt information and the polling mode with receipt information in said polling transmission section.

Claim 17 (Cancelled)

Claim 18 (Cancelled)

Claim 19 (Cancelled)

Claim 20 (Cancelled)

Claim 21 (Cancelled)

Claim 22 (Cancelled)

Claim 23 (Cancelled)

Claim 24 (Previously Amended) A communication method for a network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, wherein said server performs the steps of:

storing permanent IDs of each of the clients, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent;

polling the clients from which an ACK or NACK has not been received after having transmitted file data to the clients by means of broadcast or multicast, wherein in a polling mode with non-receipt information, a packet for polling itself or notification of

information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need reply to the polling, whereas in a polling mode with receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need not reply to the polling;

detecting a number N of clients from which an ACK or NACK has not been received in response to the transmission of the file data from the server to the clients by means of broadcast or multicast; and

switching between the polling mode with non-receipt information and the polling mode with receipt information based on the number N, and
wherein said client performs the steps of:

storing its own permanent ID information;

determining whether or not to reply to the polling based on whether its own permanent ID is contained in the packet for polling itself or notification of information prior to the polling that has been received by means of broadcast or multicast; and

based on the determination, replying or not replying to said server in response to the packet for polling received by means of broadcast or multicast.

Claim 25 (Previously Amended) A communication method for a server in a network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, comprising the steps of:

storing permanent IDs of each of the clients, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent;

polling the clients from which an ACK or NACK has not been received after

having transmitted file data to the clients by means of broadcast or multicast, wherein in a polling mode with non-receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need reply to the polling, whereas in a polling mode with receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need not reply to the polling;

detecting a number N of clients from which an ACK or NACK has not been received in response to the transmission of the file data from the server to the clients by means of broadcast or multicast; and

switching between the polling mode with non-receipt information and the polling mode with receipt information based on the number N.

Claim 26 (Cancelled)

Claim 27 (Cancelled)

Claim 28 (Cancelled)

Claim 29 (Cancelled)

Claim 30 (Cancelled)

Claim 31 (Cancelled)

Claim 32 (Cancelled)

Claim 33 (Previously Amended) A communication computer program product

comprising a computer useable medium having computer program code means recorded thereon for a network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, wherein the computer program code means causes said server computer to perform the steps of:

storing permanent IDs of each of the clients, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent;

polling the clients from which an ACK or NACK has not been received after having transmitted file data to the clients by means of broadcast or multicast, wherein in a polling mode with non-receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need reply to the polling, whereas in a polling mode with receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need not reply to the polling;

detecting a number N of clients from which an ACK or NACK has not been received in response to the transmission of the file data from the server to the clients by means of broadcast or multicast; and

switching between the polling mode with non-receipt information and the polling mode with receipt information based on the number N, and
wherein the program causes said client computer to perform the steps of:

storing its own permanent ID information;

determining whether or not to reply to the polling based on whether its own permanent ID is contained in the packet for polling itself or notification of information prior to the polling that has been received by means of broadcast or multicast; and

based on the determination, replying or not replying to said server in response to

the packet for polling received by means of broadcast or multicast.

Claim 34 (Previously Amended)   A communication computer program product comprising a computer useable medium having computer program code means recorded thereon for a server in a network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, wherein the computer program code means causes a server computer to perform the steps of:

storing permanent IDs of each of the clients, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent;

polling the clients from which an ACK or NACK has not been received after having transmitted file data to the clients by means of broadcast or multicast, wherein in a polling mode with non-receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need reply to the polling, whereas in a polling mode with receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains permanent IDs of the clients that need not reply to the polling;

detecting a number N of clients from which an ACK or NACK has not been received in response to the transmission of the file data from the server to the clients by means of broadcast or multicast; and

switching between the polling mode with non-receipt information and the polling mode with receipt information based on the number N.

Claim 35 (Cancelled)